Module - 5

Graphs And Charts

1 Barplot

barplot()

we can supply a vector or matrix as I/P

If we supply a vector, the plot will have bar with their heights equal to the elmts in v

```
temp = c(27, 26, 23, 24, 26, 28, 25)
barplot(temp)
```

main - heading

xlab - x axis name

ylab - y axis name

name.arg - name of each bar

col - color name of bar

horiz - horizontal graph (horiz = TRUE)

density - shading (density = 10)

border - bar border color

Pie chart

function : pie(x)

eg: x = c(1,1,1,2,2,3,3,4,4,4)

y = table(x)

pie(y)

main :- heading

>pie(y, main = "first")

x - input values

labels - to give labels names for slides

edges - circular o/p of pie is approximated
as polygon with many edges [default:

radius - to change radius, default - 0.8, ma

clockwise - to label in clockwise direction (cloc

density - to shade pie.

eg: density = c(10, 20, 30, 40)

diff. shading. each slides

col - to give colors

border - to give borders

Histogram

```
x = c(1,1,1,1,1,2,2,2,2,3,3,3,4,4)
y = table(x)
>y
>x
  1 2 3 4
  5 4 3 2
>hist(x)
```

To see grouping:

```
>cut(x,6)
```

* main - heading
* xlab - x axis name
* ylab - y "
* xlim - x limit
* ylim - y limit
* col - colour
* density - shading density = c(20, 30, 40)
* freq - get the prob. distribution instead of freq

  freq = FALSE

* las - to show the limit values horizontally.

  las = TRUE

* border - set border

  border = f

density - shading density = c(20, 30, 40)

freq - get the prob. distribution instead of freq.
freq = FALSE

las - to show the limit values horizontally.
las = TRUE

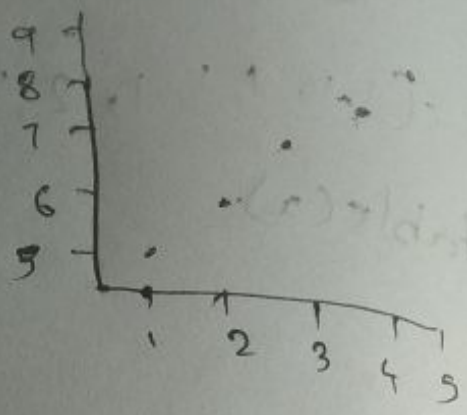
border - set border
border = f

breaks - no. of cells we want.
- place where the break occur.

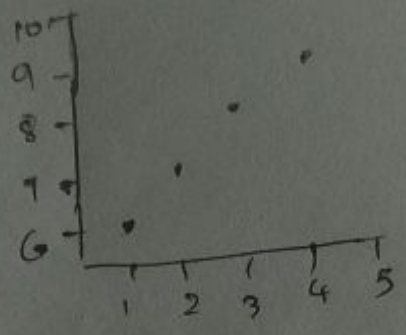
counts - no. of observations falling in that cell.

Scatter plot

eg: > plot(c(5, 6, 7, 8, 9))



> x = 1:5
> y = 6:10
> plot(x, y)



main - heading
xlab - x axis name
ylab - y axis name
col - color
type - 'p' for points
'l' for lines
'b' for both line & points
'c' for lines part alone of b
'o' over plotted
'h' for histogram
's' for stair
'S' "
'n' no plotting

* clockwise - to label in clockwise direction (clock
* density - to shade pie.
  eg: density = c(10, 20, 30, 40)
  diff. shading. each slices
* col - to give colors
* border - to give border
  border = F
* we can make 3D by installing plotrix
eg: pie3D(y)
> pie(pie3D(y, explode = 2)
It make the pie chart into pieces.

Box plot

Quantitative data plotting

Function - boxplot

> boxplot (airquality $ ozone)

main, xlab, ylab, col

notch - notch in the plot - notch = T

horizontal -: horizontal = T (display box plo

multiple box plot

> oz = airquality $ ozone

> temp = airquality $ temp

> wind = airquality $ wind

> boxplot (oz, temp, wind)

varwidth: changes the box width

eg: varwidth = 1

border - It change border color.